

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,304	11/21/2003	Bruce David D'Amora	YOR920030419US1	3006
48062 7590 02/20/2008 RYAN, MASON & LEWIS, LLP				INER
1300 POST ROAD			GOOD JOHNSON, MOTILEWA	
SUITE 205 FAIRFIELD, CT 06824		•	ART UNIT	PAPER NUMBER
ŕ			2628	
			MAIL DATE	DELIVERY MODE
			02/20/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

- j		Application No.	Applicant(s)			
Office Action Summary		10/719,304	D'AMORA, BRUCE DAVID			
		Examiner	Art Unit			
		Motilewa Good-Johnson	2628			
Period fo	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SH WHIC - Exter after - If NC - Failu Any I	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANS IN IT IS A COMMENT OF THE MAILING DANS IN (6) MONTHS from the mailing date of this communication. Poperiod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time rill apply and will expire SIX (6) MONTHS from cause the application to become ARANDONE	N. nely filed the mailing date of this communication.			
Status						
2a) <u></u> □	Responsive to communication(s) filed on <u>22 Oct</u> This action is FINAL . 2b) This Since this application is in condition for allowan closed in accordance with the practice under Ex	action is non-final.				
Dispositi	on of Claims					
5)□ 6)⊠ 7)⊠	Claim(s) <u>1-27</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) <u>1-3,8,9,11-19 and 27</u> is/are rejected. Claim(s) <u>4-7, 10, 20-26</u> is/are objected to. Claim(s) are subject to restriction and/or					
Applicati	on Papers					
9)[] ⁻ 10)[] ⁻	The specification is objected to by the Examiner The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the d Replacement drawing sheet(s) including the correction The oath or declaration is objected to by the Examiner	pted or b) objected to by the E lrawing(s) be held in abeyance. See on is required if the drawing(s) is obje	37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority u	nder 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
	(s) of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948)	4) ☐ Interview Summary (Paper No(s)/Mail Dat				
3) 🔲 Inform	nation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date	5) Notice of Informal Pa				

10/719,304 Art Unit: 2628

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 2 and 4-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lengyel, U.S. Patent Number 6,573,890 in view of Julien.

Regarding claim 1, Lengyel discloses a method for representing a three-dimensional scene using fixed point data, the method comprising the steps of: determining a geometric transform corresponding to a geometric object, the geometric object representing at least a portion of the three-dimensional scene (col. 4, lines 54-65), the geometric transform useable for quantizing a floating point space to a fixed point space, wherein the floating point space contains one or more floating point data corresponding to the geometric object (col. 10, lines 44-65 also col. 34, lines 23-33); and converting, by using the quantization transform, the one or more floating point data to one or more fixed point data (col. 34, lines 22-30)

However, it is noted that Lengyel fails to disclose representing a threedimensional scene and determining a quantization transform corresponding to a geometric object and further the object representing at least a portion of the threedimensional scene. Art Unit: 2628

Julien discloses data signal for animation of a graphic scene to be used for constructing images. Julien discloses representing a three-dimensional scene (col. 1, lines 5-14) and determining a quantization transform corresponding to a geometric object (col. 2, lines 6-12) and further the object representing at least a portion of the three-dimensional scene (col. 2, lines 8-9)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the quantization transform as disclosed by Lengyel for three dimensional graphics data the geometric objects and the three dimensional scene as disclosed by Julien, to reproduce animated graphic scenes that can be stored and or transmitted. One would be motivated to do so to reduce the amount of data need to be transmitted for display of the three dimensional animated scene.

Regarding claim 2, Lengyel discloses wherein the geometric object represents at least a portion of an object in a three-dimensional scene (col. 10, lines 50-52)

Regarding claim 3, Lengyel discloses wherein the step of converting further comprises the steps of: multiplying the quantization transform and the one or more floating point data to create temporary data in floating point; and converting the temporary data to fixed point whole number (col. 34, lines 43-50)

Regarding claim 8, Julien discloses wherein quantization transform comprises a scale factor and a translate factor (col. 5, line 61 – col. 6, line 26)

10/719,304

Art Unit: 2628

Regarding claim 9, Julien discloses further comprising the steps off computing a first transform comprising one or more of scale, rotate, and computing an inverse of the first transform (col. 5, lines 14-24); computing an inverse of the quantization transform (col. 5, lines 20-24); concatenating the inverse of the quantization transform and the inverse of the first transform to create a second transform (col. 3, lines 45-51)

Regarding claim 11, Julien discloses further comprising the steps of: converting one or more normals corresponding to the geometric object from floating point data to fixed point data (col. 5, lines 7-13); and combining textures associated with the geometric object into a single texture map (col. 6, lines 10-26)

Regarding claim 12, Julien discloses further comprising the steps of storing the one or more fixed point data in a quantized scene file; and storing the second transform in the quantized scene file (col. 3, lines 45-51)

Regarding claim 13, Julien discloses wherein the floating point data are vertices corresponding to the geometric object (col. 2, lines 5-17)

Regarding claim 14, Julien discloses wherein the geometric object corresponds to a Geometry node of a scene graph (col. 1, lines 28-30)

Regarding claim 15, it is rejected based upon similar rational as above claim 1.

Lengyel further discloses one or more memories (522); and one or more processors (521) coupled to the one or more memories (figure 13).

Regarding claims 16 and 17, they are rejected based upon similar rational as above claim 1.

Regarding claim 18, Julien discloses wherein the step of determining a quantization transform further comprises the step of reading the quantization transform from a file, wherein the file comprises the quantization transform and the one or more fixed point data corresponding to the geometric object (col. 3, lines 45-51)

Regarding claim 19, Julien discloses wherein a file comprises a plurality of geometric objects (col. 1, lines 26-30), and wherein the method further comprises the steps of: parsing the file; and creating a scene graph from the parsed file (col. 1, lines 32-33)

Regarding claim 27, it is rejected based upon similar rational as above claim 15.

10/719,304 Art Unit: 2628

Allowable Subject Matter

3. Claims 4-7, 10 and 20-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Motilewa Good-Johnson whose telephone number is (571) 272-7658. The examiner can normally be reached on Monday-Friday 8-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Motilewa Good-Johns**¢**r

Examiner

Application/Control Number: 10/719,304 Art Unit: 2628

Page 7

Art Unit 2628

mgj